

## CLAIMS

### WHAT IS CLAIMED IS:

1. An amusement simulation apparatus comprising a screen, projector assembly and a platform positioned on the platform stanchion and linked with platform rotating shaft. The projector assembly consists at least one projector and is located in the middle part of the platform that is hollow and linked with the tower. Passenger seats arranged in longitudinally and transverse directions round the projector assembly are positioned on the platform. The passenger seats are hung by hanging bracket through suspending rotating shaft. The hanging bracket is fixed or semi-fixed linked with the platform. Seat pivoting structure that can make the aligned seats pivot certain angle upon the suspending rotating shaft is positioned in the joint of each aligned seats and the platform. There is drive set on the both ends of the platform, which can drive the platform rotate round it.

2. A simulation apparatus as defined in claim 1 wherein, said screen is hemisphere screen; and the number of said projectors located in the center of the hemisphere screen is two.

3. A simulation apparatus as defined in claim 1 wherein the yawing structure is positioned in the inboard of the aligned passenger seats in left and right columns and linked with the platform. The yawing structure can make the passenger seats in the left and right columns rotate round the longitudinal yawing shaft.

4. A simulation apparatus defined as claim 1 further comprising an air blower that at the side close to the screen and beneath the platform, which blasts upwards.

5. A simulation apparatus as defined in claim 1 wherein drive set can be reversed cylinder, hydraulic cylinder or steel wire draft gear, etc. Pivoting structure is hydraulic cylinder

6. A simulation apparatus as defined in claim 3 wherein the yawing structure is hydraulic cylinder.

7. A simulation apparatus as defined in claim 1 wherein the passenger seats can be arranged in several rows such as horizontal and several columns in longitudinal orientation. There are sufficient spaces between rows and columns. Blocking plate is positioned above each aligned passenger seats.

8. A simulation apparatus as defined in claim 1 wherein the said platform can rotate certain angle round the platform-rotating shaft in vertical plane and the said aligned seats can pivot certain angle upon the suspending shaft.

9. A simulation apparatus as defined in claim 1 further comprising the canopy positioned on the tower. The canopy matched the platform's area and passenger seats' height can rotate round the rotating shaft.

10. The method of providing passengers with a combined viewing and motion experience comprising the following steps of:

- a. The platform is in horizontal position. Close the canopy; and
- b. Passengers board the platform through entrance aisle, sit on the passenger seats and fasten the safety belts; and
- c. Pull up the canopy, start reversed cylinder which drives the platform rotate until the vertical position is reached in which the passenger face the display screen, and start the yawing cylinder drive the left and right longitudinally aligned seats rotate certain angle towards the display screen; and
- d) Project image on the screen. Coordinating the image on the screen, the platform and passenger seats pitch up or down. The air blower beneath the passenger seats can blast upwards according to the image displayed on the screen; and
- e) The left and right longitudinally aligned seats yaw back to original position and the platform rotates to horizontal position. Lay down the canopy. The safety belt is loosened and passengers leave through exit aisle.